Application/Control Number: 09/972,929   Docket No.: 2000-0499
Art Unit: 2655

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently Amended) A method of dynamic re-configurable speech recognition comprising:

determining parameters of a background model at a periodic time during a received voice request;

determining parameters of a transducer model;

determining an adapted speech recognition model for a speech recognition model based on at least one of the background model and the transducer model; and

determining information in the voice request based on the adapted speech recognition model; and

adjusting the periodic time based, at least in part, on determined changes in sampled noise information.

2.   (Currently Amended) The method of claim 1, further comprising the steps of:

determining at least one sample period;

periodically determining at least one of a new background model and a new parameters of the transducer model based on the at least one sample period.

3.   (Original) The method of claim 2, wherein,

the parameters of the background model are determined based on a first sample period; and

the parameters of the transducer model are determined based on a second sample period.

2

Application/Control Number: 09/972,929   Docket No.: 2000-0499
Art Unit: 2655

4.   (Currently Amended) The method of claim 2, further comprising the steps of:

saving at least one of the parameters of the background model and the parameters of

the transducer model;

determining the adapted speech recognition model based on the at least one sample

period and at least one of the background model and or the transducer model.

5.   (Currently Amended) A system for dynamic re-configurable speech recognition

comprising:

a background model estimation circuit for determining a background model during a

voice request based on estimated background parameters determined at a periodic time during

a reception of the voice request;

a transducer model estimation circuit for determining a transducer model of the voice

request based on estimated transducer parameters;

an adaptation circuit for determining an adapted speech recognition model based on a

speech recognition model and at least one of the background model and or the transducer

model; and

a controller adapted to adjust the periodic time based, at least in part, on determined

changes in sampled noise information.

6.   (Currently Amended) The system of claim 5, wherein, a the controller determines at

least one sample period and based on the at least one sample period periodically activates at

least one of the background model estimation circuit and the transducer model estimation

circuit.

3

Application/Control Number: 09/972,929   Docket No.: 2000-0499
Art Unit: 2655

7.   (Original) The system of claim 6, wherein,

the background model is determined based on a first sample period; and

the transducer model is determined based on a second sample period.

8.   (Currently Amended) The system of claim 6, wherein the controller saves at least one

of the background model ~~and~~ or the transducer model into storage; and wherein the adapted

speech recognition model is based on ~~the at least one sample period and~~ at least one of the

background model ~~and~~ or the transducer model.

9.   (Currently Amended) A carrier wave encoded to transmit a control program usable

for dynamic re-configurable speech recognition to a device for executing the control

program, the control program comprising:

    instructions for determining parameters of a background model at a periodic time

during a received voice request;

    instructions for determining parameters of a transducer model;

    instructions for determining an adapted speech recognition model for a speech

recognition model based on at least one of the background model ~~and~~ or the transducer

model; ~~and~~

    instructions for determining information in the voice request based on the adapted

speech recognition model; and

    instructions for adjusting the periodic time based, at least in part, on determined

changes in sampled noise information.

10.   (Currently Amended) The carrier wave of claim 9, further comprising ~~the steps of~~:

    ~~instructions for determining at least one sample period;~~

4

Application/Control Number: 09/972,929   Docket No.: 2000-0499
Art Unit: 2655

instructions for <u>periodically</u> determining ~~at least one of a new background model and~~

~~a~~ new <u>parameters of the</u> transducer model ~~based on the at least one sample period~~.

11.   (Currently Amended) The carrier wave of claim 10, wherein,

the background model is determined based on ~~the~~ <u>a</u> first sample period; and

the transducer model is determined based on a second sample period.

12.   (Currently Amended) The carrier wave of claim 10, further comprising:

instructions for saving at least one of the background model ~~and~~ <u>or</u> the transducer

model;

instructions for determining the adapted speech recognition model based on ~~the at~~

~~least one sample period and~~ at least one of the background model ~~and~~ <u>or</u> the transducer

model.

13.   (Currently Amended) A computer readable storage medium comprising:

computer readable program code embodied on a computer readable storage medium,

said computer readable program code usable to program a computer to perform a method for

dynamic re-configurable speech recognition comprising ~~the steps of~~:

determining parameters of a background model <u>at a periodic time</u> during a

received voice request<u>;</u>

determining parameters of a transducer model;

determining an adapted speech recognition model for a speech recognition

model based on at least one of the background model and the transducer model; ~~and~~

determining information in the voice request based on the adapted speech

recognition model<u>; and</u>

5

Application/Control Number: 09/972,929   Docket No.: 2000-0499
Art Unit: 2655

>   adjusting the periodic time based, at least in part, on determined changes
>
>   sampled noise information.

14.   (Currently Amended) A method of dynamic re-configurable speech recognition
comprising ~~the steps of~~:

>   periodically determining user specific parameters of a background model at periodic
>   time periods during a received voice request;
>
>   periodically determining user specific parameters of a transducer model;
>
>   ~~determine~~ determining an adapted speech recognition model for a speech recognition
>   model based on at least one of the background model ~~and~~ or the transducer model; and
>
>   determining information in the voice request based on the adapted speech recognition
>   model;
>
>   ~~determining at least one sample period;~~
>
>   ~~determining at least one of a new background model and~~ or ~~a new transducer model~~
>   ~~based on the at least one sample period, wherein the background model is determined based~~
>   ~~on a first sample period and the transducer model is determined based on a second sample~~
>   ~~period.~~

15.   (Canceled)

16.   (Currently Amended) The method of claim 1, wherein ~~the step of~~ determining
parameters of ~~the~~ a background model at a periodic time during a received voice request
further comprises periodic sampling during periods of speech inactivity while receiving the
voice request.

17-18. (Canceled)

6

Application/Control Number: 09/972,929   Docket No.: 2000-0499
Art Unit: 2655

19.   (Previously Presented) The system of claim 5, wherein the background model

estimation circuit constantly determines the estimated background parameters while receiving

the voice request.

20.   (Canceled)

21.   (New) The method of claim 1, wherein adjusting the periodic time based, at least in

part, on determined changes of the parameters of the background model further comprises:

        dynamically determining the periodic time based, at least in part, on a frequency or a

magnitude of determined changes in the sampled noise information.

22.   (New) The method of claim 1, wherein adjusting the periodic time based, at least in

part, on determined changes of the parameters of the background model further comprises:

        increasing the periodic time when successive changes in sampled noise information

do not exceed a threshold value.

23.   (New) The system of claim 5, wherein the transducer model estimation circuit is

adapted to periodically determining a transducer model of the voice request based on

estimated transducer parameters.

24.   (New) The system of claim 5, wherein the controller is further adapted to adjust the

periodic time based, at least in part, on a frequency or a magnitude of determined changes in

successively sampled ones of the noise information.

7